

MONTHLY WEATHER REVIEW.

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The MONTHLY WEATHER REVIEW summarizes the current manuscript data received from about 3,500 land stations in the United States and about 1,250 ocean vessels; it also gives the general results of the study of daily weather maps based on telegrams or cablegrams from about 200 North American and 40 European, Asiatic, and oceanic stations.

The hearty interest shown by all observers and correspondents is gratefully recognized.

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As far as practicable the time of the seventy-fifth meridian is used in the text of the MONTHLY WEATHER REVIEW.

Barometric pressures, both at land stations and on ocean vessels, whether station pressures or sea-level pressures, are reduced, or assumed to be reduced, to standard gravity, as well as corrected for all instrumental peculiarities, so that they express pressure in the standard international system of measures, namely, by the height of an equivalent column of mercury at 32° Fahrenheit, under the standard force, i. e., apparent gravity at sea-level and latitude 45°.

FORECASTS AND WARNINGS.

By Prof. E. B. GARRIOTT, in charge of Forecast Division.

From the Plains States to the Atlantic coast January was unusually dry until the closing days of the month. In the Rocky Mountain districts snowfalls were exceptionally heavy. West of the Rockies there was an excess of precipitation that over western Oregon and a greater portion of California amounted to 5 to 15 inches.

The first decade of January was very cold from the Great Lakes westward to the Pacific, and from the upper Missouri Valley westward the average temperature for this period was 15° to 25° below the seasonal average, with absolute minimum readings 30° to 55° below zero in Montana. From North Dakota to Washington and in northern Oregon the cold exceeded any previous record for the same period.

The following are among many comments that were made by the press regarding warnings issued in connection with a severe cold wave that swept the country from the Rocky Mountains to the Atlantic during the first decade of the month:

Kansas Farmers' Star, Wichita, Kans., January 8, 1909.

The weather man gave the farmers of the Southwest plenty of warning. There can't be any very good excuse for not having provided shelter for their live stock.

Market Growers' Journal, Louisville, Ky., January 16, 1909.

* * * This cold wave was forecast in a special bulletin sent out by the Weather Bureau Saturday afternoon, January 2. This forecast indicated the coldest weather of the season for States east of the Mississippi River and was issued in ample time to warn all growers who needed the warning. * * *

Post-Express, Rochester, N. Y., January 5, 1909.

* * * Hundreds of shippers are holding back shipments on warnings from the Weather Bureau and many shipments were rushed following the warning sent out last week. The absolute accuracy of the two special forecasts made by the Weather Bureau at Washington has aroused much favorable comment among business men here and in some instances have saved thousands of dollars for nurserymen and brewers.

Daily Times-Union, Jacksonville, Fla., January 11, 1909.

* * * The point of interest involved in the forecast is the fact that nine days ago the Washington office announced the existence of conditions that favored cold wave formation, and on Monday and Tuesday the

same office gave notice that the cold wave actually existed in the Northwest, and that the extreme cold would reach the seaboard States during the last of the week, which was exactly the case, for on Friday the temperature in the middle Atlantic section was about 15° above zero, and freezing prevailed over the south Atlantic section.

The merit of such long range weather predictions lies in the fact that they enable shippers to meet contingencies; for instance, the Florida shipper of fish knows that no re-icing will be necessary, and the banana shipper from Mobile and New Orleans provides the necessary warmth for his cars. Other commodities to interior points are given the necessary attention.

During the second and a great portion of the third decade of the month the weather was unusually mild generally over the United States, and from the 23d to 25th maximum readings equaled the record at numerous points from the middle and southern Rocky Mountain slope to the Atlantic coast. During the last few days of the month a storm moved eastward from the middle Rocky Mountain region to New England attended from the lower Missouri Valley eastward by the severest weather of the present season, and followed by a cold wave that carried the line of freezing temperature as far south as the middle Florida Peninsula.

The Times, Tampa, Fla., of February 1, 1909, refers editorially as follows to warnings issued in connection with this cold wave:

The Weather Bureau gave ample warning so that persons who desired and were prepared could "fire" their groves and shelter their seed beds and avoid any loss whatever. The value of the Bureau is made more evident every year by the saving it enables people to make in defending themselves against cold and storms.

BOSTON FORECAST DISTRICT.*

[New England.]

Temperature was near or slightly above normal and over the greater portion of the district precipitation was somewhat in excess of the normal, with average snowfall in northern and a deficiency of snowfall in southern portions. The only severe storm of the month occurred on the 29-30th, when severe gales swept the coast. There were no storms without warnings. Cold-wave warnings were issued on the 6th and 15th.—
J. W. Smith, District Forecaster.